BIOGEAR EPS

Overview: BioGear EPS is a line of industrial gear oils formulated to provide excellent protection in a wide variety of industrial and mobile equipment. The blend of natural ester and synthetic base oils enable BioGear EPS to perform at high levels for extended periods of time and fit within the AGMA definition of industrial gear oils. BioGear EPS reduces operating temperatures and wear. These products are available in ISO 100, 150 and 220 grades.

Specifications, Approvals, Recommendations:

- Meets AGMA 9005-E02 Industrial Gear Specification
- USDA BioPreferred Program
- Classified as Environmentally Acceptable Lubricants (EAL's) as per the EPA's 2013 U.S. Vessel General Permit (VGP)

Physical Properties	EPS 100	EPS 150	EPS 220
ISO Grade	150	150	220
Specific Gravity	.91	.91	.91
Viscosity, ASTM D445 @40°C, cS	100	150	220
Viscosity, ASTM D445 @100°C, cS	25.2	25.2	33.0
Viscosity Index (VI), ASTM D2270	>220	>220	>220
Pour Point, ASTM D97, °F (°C)	-30 (-34)	-30 (-34)	-25 (-31)
Flash Point, ASTM D92, °F (°C)	>500 (260)	>500 (260)	>500 (260)
Timken OK Load, ASTM D2509	>60lbs	>60lbs	>60lbs
Falex EP Fail Load, ASTM D3233	3500	3500	3500
Copper Corrosion, ASTM D4048	1A	1A	1A
Rust Test, ASTM D665, A & B	PASS	PASS	PASS
Recommended for Agma No.	3EP	4EP	5EP
FZG Load Stage, DIN 51354	12	12	12
Environmental Stewardship: Meets EPA requirements to be classified as an EAL per the 2013 VGP			
Readily Biodegradable (meaning>60%) OECD 301B, %	PASS >85	PASS >85	PASS >85
Minimally Toxic OECD 201 - Algae (EC 50), 72 hr, mg/L OECD 202 - Daphnia (EC 50), 48 hr, mg/L OECD 203 - Fish (LC 50), 96 hr, mg/L	PASS >14,000 mg/L >20,000 mg/L >30,000 mg/L	PASS >14,000 mg/L >20,000 mg/L >30,000 mg/L	PASS >14,000 mg/L >20,000 mg/L >30,000 mg/L
Not Bioaccumulative* (*Calculated value as per EPA standard)	PASS	PASS	PASS
Additional Environmental Features and Characteristics			
Bio-based Content, ASTM D6866, %	>85	>85	>85

Applications & Industries: To be used in industrial gear applications across a wide range of industries. Use in equipment where a release into the environment is possible, where the authorities have mandated the usage of an EAL, or where a leak or spill could reach a waste stream.